



# INSTRUCTIONS

-J05522

REV. 2015-05-12

## BOOM! AUDIO CRUISER AMP AND SPEAKER KITS - HANDLEBAR MOUNT

### GENERAL

#### Kit Numbers

76262-08A, 76320-08A

#### Models

For model fitment information, see the P&A retail catalog or the Parts and Accessories section of [www.harley-davidson.com](http://www.harley-davidson.com) (English only).

#### Installation Requirements

The following models require separate purchase of an Electrical Connection Kit (Part No. 72673-11):

- 2011 and later Softail® models
- 2012 and later Dyna® FLD Switchback models
- 2014 Sportster models

The following models require separate purchase of a Speaker and Amplifier Relay Kit (Part No. 69200397):

- 2000-2010 Softail models
- 2010-2011 FXDWG (Dyna Wide Glide®) models
- 2004-2013 XL Sportster® models
- 1999-2013 Road King® models

The following models require separate purchase of Kit (Part No. 69200722):

- 2014 and later Road King models

Connection to a portable audio player (purchased separately) with a 1/8-inch (3.5 mm) stereo output (headphone jack or audio line out) is required.

#### NOTES

*A Boom! Audio Tank Pouch (Part No. 91003-10) can be used to secure a **solid-state** portable audio player.*

***DO NOT** secure a portable audio player with a **hard drive memory** on or to the vehicle.*

For best sound quality, an installed windshield is recommended.

An UltraTorch UT-100 (Part No. HD-39969), Robinair Heat Gun (Part No. HD-25070) with Heatshrink Attachment (Part No. HD-41183), or other suitable radiant heating device is required for the proper installation of this kit.

Electrical Contact Lubricant (Part No. 99861-02) or equivalent is required after battery cable disconnection. This item is available from a Harley-Davidson dealer.

#### WARNING

**The rider's safety depends upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333a)**

#### NOTE

*This instruction sheet refers to service manual information. A service manual for this year/model motorcycle is required for this installation and is available from a Harley-Davidson dealer.*

#### Electrical Overload

#### NOTICE

**It is possible to overload your vehicle's charging system by adding too many electrical accessories. If the combined electrical accessories operating at any one time consume more electrical current than the vehicle's charging system can produce, the electrical consumption can discharge the battery and cause damage to the vehicle's electrical system. See an authorized Harley-Davidson dealer for advice about the amount of current consumed by additional electrical accessories or for necessary wiring changes. (00211c)**

#### WARNING

**When installing any electrical accessory, be certain not to exceed the maximum amperage rating of the fuse or circuit breaker protecting the affected circuit being modified. Exceeding the maximum amperage can lead to electrical failures, which could result in death or serious injury. (00310a)**

The Amp and Speaker Kit requires up to **4.0 A** additional current from the electrical system.

#### Kit Contents

See Figure 7 and Table 1.

## PREPARATION

### NOTE

For 2007 and later vehicles equipped with security siren:

- Verify that the Hands-Free Fob is present.
- Turn the ignition key switch to IGNITION.

For EFI Models:

### WARNING

To prevent spray of fuel, purge system of high-pressure fuel before supply line is disconnected. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00275a)

See the service manual. Purge and disconnect fuel supply line.

For ALL Vehicles With Main Fuse:

### WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, remove main fuse before proceeding. (00251b)

1. See the service manual. Remove the main fuse and the seat. Retain the seat and all mounting hardware.

For ALL Vehicles With Main Circuit Breaker:

### WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect negative (-) battery cable before proceeding. (00048a)

### NOTE

For 2004 and later XL Sportster models, the negative battery cable is most easily disconnected at the engine crankcase.

1. See the service manual. Remove the seat and disconnect the negative (black) battery cable from the negative (-) battery terminal. Retain all seat mounting hardware.
2. **For ALL models:** Turn the ignition key switch OFF if not already done.
3. See the service manual or instructions in the accessory kit. Remove windshield. Make sure to protect the windshield from scratches during removal and installation, and while off the vehicle.

For Carbureted Models:

### WARNING

Gasoline can drain from the carburetor fuel line when disconnected from fuel valve fitting. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. Wipe up spilled fuel immediately and dispose of rags in a suitable manner. (00256a)

4. Turn the fuel supply valve OFF. Remove the fuel line from the valve.

For ALL models:

### WARNING

When servicing the fuel system, do not smoke or allow open flame or sparks in the vicinity. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00330a)

5. See the service manual. Remove the instrument console (if equipped) from the fuel tank.
6. See the correct section (Carbureted or EFI Engine) of the service manual for fuel tank removal instructions.
7. **For Road King models only:** Remove the handlebar cover from the vehicle. Separate the left and right nacelle halves. Remove the headlamp assembly per service manual instructions.

## INSTALLATION

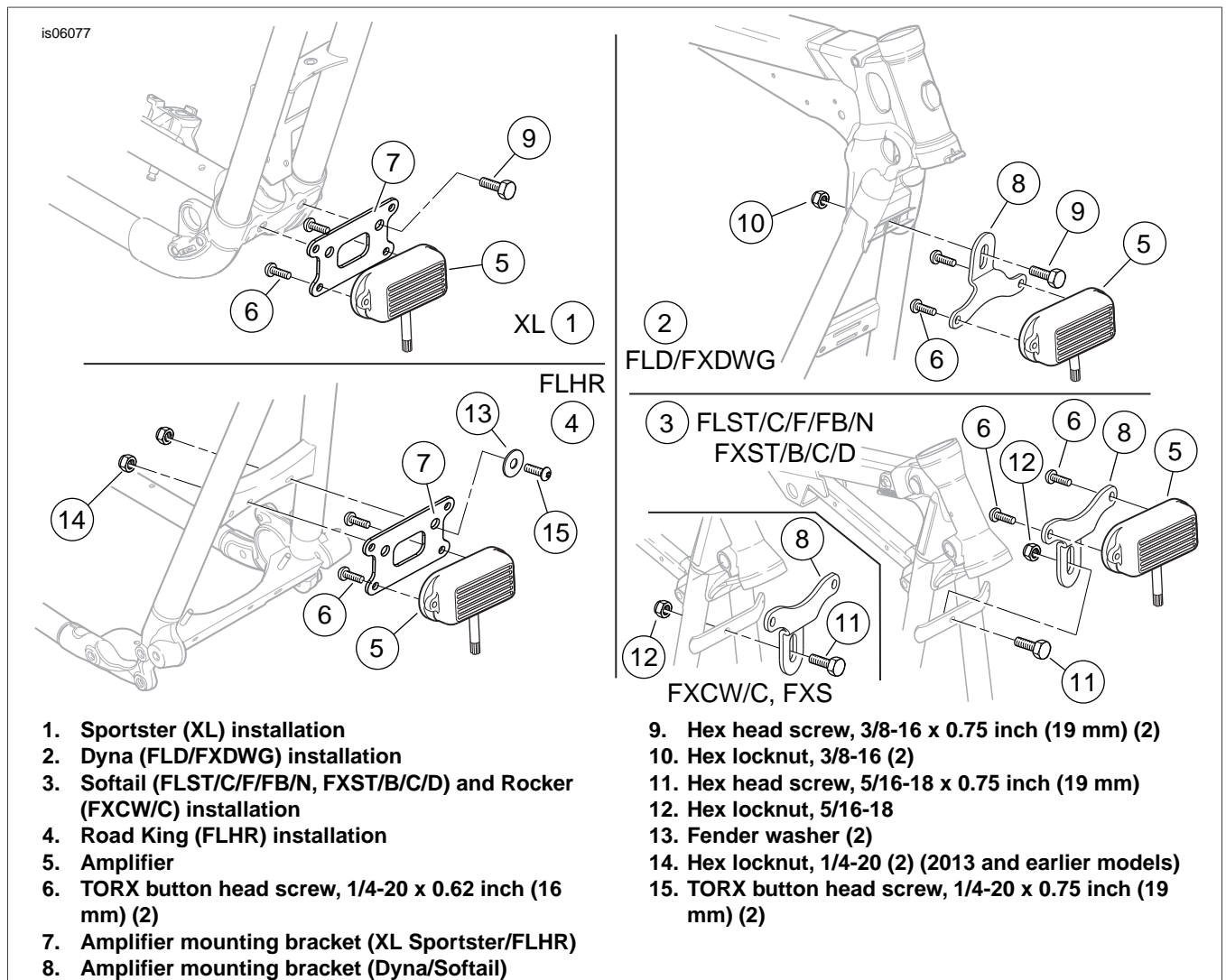
### Amplifier and Bracket Installation

1. See Figure 7. Select two screws (6) and the correct amplifier mounting bracket (item 7 or 8) from the kit.
  - **For Road King and XL Sportster models:** select bracket (7).
  - **For Dyna and Softail models:** select bracket (8).

### NOTE

The wire exiting the amplifier must face **downward**.

2. See Figure 1. Install the amplifier (5, part of the wire harness assembly) to the bracket with the screws (6), and tighten to 65 **in-lbs** (7.4 Nm).
3. **If this kit is being installed on a vehicle with an engine guard (except for Road King models),** use the engine guard hardware to secure the amplifier bracket.  
**If NOT being installed with an engine guard,** use hardware from the kit to secure the amplifier bracket. See Figure 7.
  - **For XL Sportster models:** Select two screws (9) from the kit.
  - **For Dyna models:** Select one screw (9) and one locknut (10) from the kit.
  - **For Softail models:** Select screw (11) and locknut (12) from the kit.
  - **For Road King models:** Select two screws (15), two washers (13) and two locknuts (14) from the kit.



**Figure 1. Amplifier and Bracket Installation**

4. See Figure 1. Install the amplifier and bracket to the frame crossmember between the front down tubes as shown.
    - **For XL Sportster models:** Tighten the fasteners to 30-33 ft-lbs (40.7-44.8 Nm).
    - **For Dyna models:** Tighten the fasteners to 30-33 ft-lbs (40.7-44.8 Nm).
    - **For Softail models (except Rocker™):** The amplifier bracket installs **behind** the crossbar. Tighten the fasteners to 19 ft-lbs (25.8 Nm).
    - **For Rocker models:** The amplifier bracket installs **in front** of the crossbar. Tighten the fasteners to 19 ft-lbs (25.8 Nm).
    - **For Road King models:** Tighten the fasteners to 65 in-lbs (7.4 Nm).
- Hand Control and Bracket Installation**
1. See Figure 2. Remove the front brake lever clamp screws from the vehicle. Remove and retain the clamp (1). The screws can be discarded.
    - 2. Obtain the hand control bracket (3), two spacers (2), two screws (6) and:
      - **for 2004 and later XL Sportster models:** two screws (4) from the kit.
      - **for ALL OTHER models:** two screws (4) from the kit.
    - 3. Route the hand control (5) wire harness through the center of the hand control bracket (3) as shown.
    - 4. Position the spacers into the clamp mounting cutouts. Place the hand control bracket onto the spacers. Install the clamp, spacers and bracket to the brake master cylinder with the two screws. Tighten the screws to:
      - **for 2004 and later XL Sportster models:** 108-132 in-lbs (12.2-14.9 Nm).
      - **for ALL OTHER models:** 60-80 in-lbs (6.8-9.1 Nm).
    - 5. Install the hand control (5, part of the wire harness assembly) to the bracket with screws (6). Tighten securely.
    - 6. Use cable straps from the electrical hardware pack to secure the wiring to the existing hand control wiring.

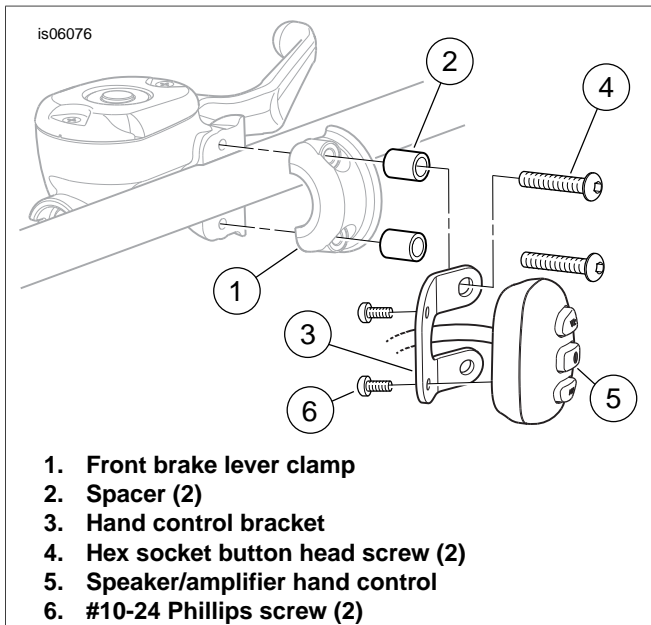


Figure 2. Hand Control and Bracket Installation

## Speaker Installation

### NOTES

Test-fit to determine the desired location for the speakers on the handlebar.

Both speaker pods are wired together with a single electrical connector. Do not separate for test-fit or installation.

- The speaker clamps shall be positioned so the speakers are above the bar. The speakers should appear symmetrical to the left and right of the handlebar clamp, and should be placed as close to the center of the motorcycle as possible.
- The upper clamps can be positioned so the speaker mounts are in front of or behind the bar.
- If the vehicle is normally equipped with a windshield, locate the clamps on the middle straight section of the bar so the speaker housings will clear the windshield.
- The Bar & Shield trim badges on the speaker faces can be rotated to the desired orientation after installation by pushing with two fingers and turning.
- Check to be sure speaker and clamp positioning will not interfere with steering function, control operation or visibility of instruments.

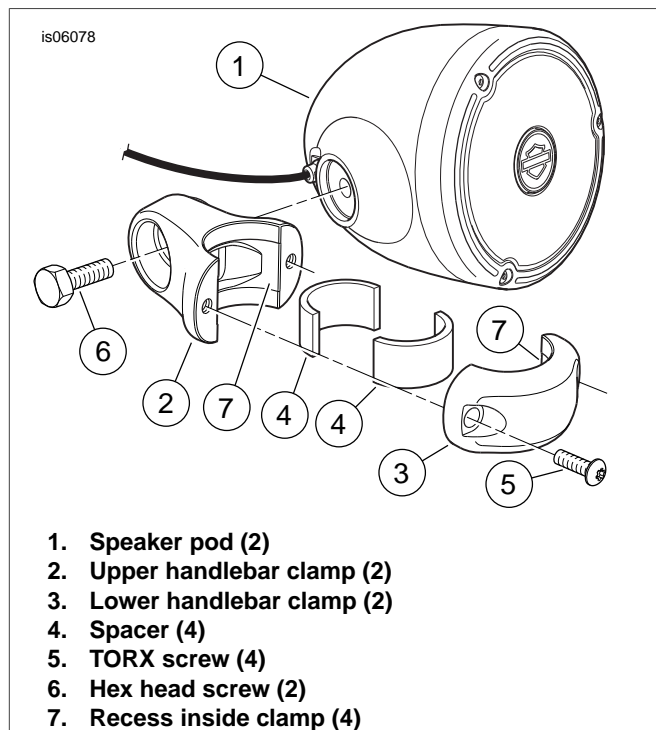
1. See Figure 3. Obtain the following items from the kit:
  - speaker pod assembly (1)
  - two upper handlebar clamps (2)
  - two lower handlebar clamps (3)
  - four spacers (4)
  - four screws (5)
  - two screws (6)

If mounting to 1-1/4 inch (31.8 mm) diameter handlebars, the spacers can be discarded.

### NOTE

Insert the spacers inside the clamps for vehicles with 1.0 inch (25.4 mm) diameter handlebars. Make sure the spacers seat in the recesses (7) inside the clamps.

2. Secure each speaker clamp pair to the handlebar with two screws (5), and tighten to 60 in-lbs (6.8 Nm)
3. Position a speaker pod, oriented with the speaker grille facing the rider as directly as possible, onto each upper clamp. Secure each speaker pod to the upper clamp with a hex head screw (6). Tighten the screw to 12-14 ft-lbs (16.3-19.0 Nm).



1. Speaker pod (2)
2. Upper handlebar clamp (2)
3. Lower handlebar clamp (2)
4. Spacer (4)
5. TORX screw (4)
6. Hex head screw (2)
7. Recess inside clamp (4)

Figure 3. Handlebar-Mounted Speaker Installation

## WIRE HARNESS CONNECTION

### General

Splicing of wire leads is necessary in the installation of the speaker and amplifier kit to the motorcycle. Find the instructions for a specific model in the sections that follow, and refer to the service manual appendix for proper wire splicing procedures.

### ⚠ WARNING

**Be sure to follow manufacturer's instructions when using the UltraTorch UT-100 or any other radiant heating device. Failure to follow manufacturer's instructions can cause a fire, which could result in death or serious injury. (00335a)**

- Avoid directing heat toward any fuel system component. Extreme heat can cause fuel ignition/explosion resulting in death or serious injury.
- Avoid directing heat toward any electrical system component other than the connectors on which heat shrink work is being performed.
- Always keep hands away from tool tip area and heat shrink attachment.

**For 2014 and later Sportster models:** Proceed to the next section.

**For 2012 and later Dyna models:** Proceed to the next section.

**For 2011 and later Softail models:** Proceed to the next section.

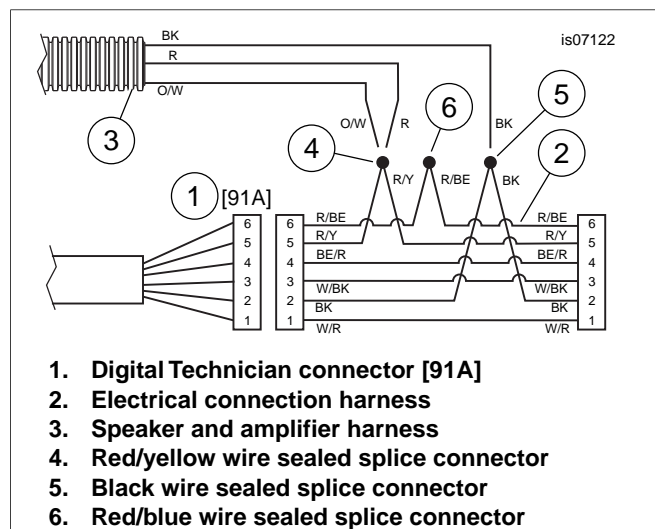
**For 2014 and later Touring models:** Proceed to **THAT** section.

**For ALL OTHER models:** Proceed to **THAT** section.

**For 2012 and Later Dyna, 2011 and Later Softail, and 2014 and Later Sportster Models**

#### NOTE

Requires separate purchase of Electrical Connection Kit (Part No. 72673-11).



**Figure 4. Wiring Diagram, Speaker/Amplifier Harness to Electrical Connection Harness**

1. Install the Electrical Connection Harness:
  - a. See Figure 4. Locate the Digital Technician connector [91A] (Item 1, a gray six-way Deutsch connector with a rubber boot) under the seat. Place the Electrical Connection Harness (2) at the Digital Technician connector, but **DO NOT** connect them now.
  - b. Route the speaker and amplifier harness (3) wires over to the Electrical Connection Harness. Cut the speaker and amplifier wires to a suitable length to easily reach the sealed splice connectors (4 and 5) on the Electrical Connection Harness.
  - c. Splice both the red and the orange/white speaker and amplifier wires to the **red/yellow** wire sealed splice connector (4) in the Electrical Connection Harness.
  - d. Splice the black speaker and amplifier wire to the **black** wire sealed splice connector (5) in the Electrical Connection Harness.
  - e. Use a heat gun or suitable radiant-heating device to shrink the connector to the wires.
  - f. Use the heat gun or heating device to seal the open end of the sealed splice connector (6) on the **red/blue** wires in the Electrical Connection Harness.
  - g. Pull the rubber boot out from the gray Digital Technician pin connector [91A]. Cut the boot off the wires.
  - h. Connect the socket housing of the Electrical Connection Harness to connector [91A].
  - i. Insert the rubber boot into the open pin connector of the Electrical Connection Harness.
  - j. Proceed to **WIRE ROUTING**.

### For 2014 and later Road King Models

Electrical connectors are identified in the service manual by the number and letter shown here within brackets.

#### NOTE

Wire harness (part no. 69200722) may have been previously installed during the installation of another accessory. If it is already installed, it is not necessary to replace it.

Use Y-connector 70264-94A for additional 4-way connectors. If accessory wires have already been spliced to 69200722 in a prior install, it is possible to splice in up to three accessories.

1. Locate the gray 8-way pin-side Molex connector [4A] under the left side cover. It is located in the electrical caddy, directly over the Digital Tech Connector [91A]. If wire harness (part no. 69200722) is already connected to connector [4] from a prior install, then disconnect it.
2. Route the harness from the Electrical Connection Kit according to the instructions in that kit.

#### NOTE

Do not connect the 8-way connectors now.

3. The electrical connections will be made to 2 (or 3) of the sealed cap ends of the Electrical Connection kit.
4. See the service manual for detailed instructions on sealed splice connections.

If wire harness (part no. 69200722) was previously spliced, cut off existing splices. See Figure 4 for multiple splice configuration.

If wire harness (part no. 69200722) was spliced in a prior install, make sure the 8-way Molex connector is disconnected from vehicle connector [4].

- a. Clip the cap off the black wire, strip back, crimp & seal to BLACK wire of the wire harness of (this kit).
- b. Clip the cap off the violet/blue wire of 69200723, strip back, crimp & seal to orange/white and the RED wire of the wire harness of (this kit).
- c. **DO NOT REMOVE** the sealed cap from the RED wire- it is not used.

5. Remove the weather cap from connector [4A] and connect the 8-way connectors together.

### For ALL OTHER Models

#### NOTE

Requires separate purchase of Speaker and Amplifier Relay Service Kit (Part No. 69200397).

1. Route the speaker and amplifier harness to the area under the seat.
2. See Figure 7. Get the electrical hardware pack (22) from **THIS** kit.
3. Select the in-line fuse holder (23) and one blue sealed splice connector (28) from the hardware pack.
4. Get the relay kit (Part No. 69200397), purchased separately. Refer to the instructions **that follow BELOW** for relay installation.
5. See Figure 5. Find a suitable location under the seat for the relay (1), so that the terminals face **down or horizontally**. The terminals should not face upward.
6. Cut the **orange/white** wire (2) in the main electrical harness near the rear lighting connector [7].
7. See the service manual appendix. Use a suitable radiant-heating device to splice and seal the two cut orange/white wires to the sealed splice connector (4) on the orange/white wire (3) from relay terminal 2.

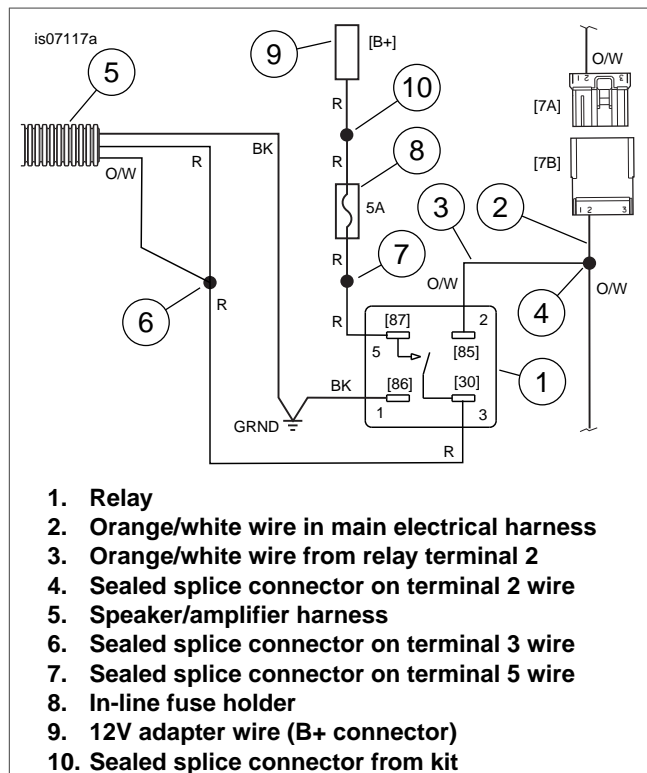


Figure 5. Wiring Diagram, Speaker/Amplifier Harness to Relay

8. Cut the speaker and amplifier harness (5) red and orange/white wires to a suitable length to easily reach the sealed splice connectors on the relay. Splice and seal the red and orange/white wires to the sealed splice connector (6) on the red wire of relay terminal 3.
9. Select the sealed splice connector (7) on the free end of the **red** wire coming from relay terminal 5. Splice the red wire on one end of the in-line fuse holder (8) to the red wire of relay terminal 5.
10. Splice the opposite end of the in-line fuse holder to the 12V adapter wire (9) with the blue sealed splice connector (10) from the hardware pack.
11. See Figure 6. Locate the B+ (battery positive) connector (1) on the main electrical harness under the seat (a red wire with an unused gray connector). Remove the cover (2) from the B+ connector.
12. Connect the **red** 12V adapter wire connector on the wire harness assembly to the B+ connector.

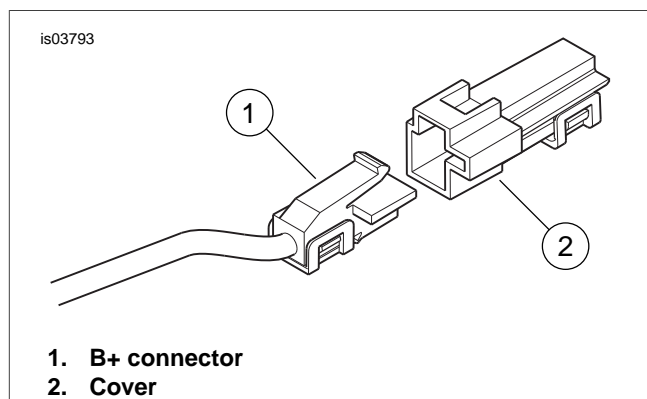


Figure 6. B+ Connector

13. See Figure 7. Select a ring terminal from the electrical hardware pack.
  - **Dyna Wide Glide models:** use the 5/16 inch (7.9 mm) ID terminal (27).
  - **All models EXCEPT Dyna Wide Glide:** use the 1/4 inch (6.4 mm) ID terminal (26).
14. Select the free end of the **black** wire in the speaker and amplifier harness assembly. Cut the black wire to easily reach the location of the vehicle ground. Crimp the ring terminal to the black wire per the instructions in the service manual.
15. Select the black wire from relay terminal 1. Attach both black wire ring terminals to the vehicle ground stud.

## WIRE ROUTING

1. Use cable straps (29) from the electrical hardware pack to secure the amplifier wiring to the frame downtube.
 

**For Road King models:** Use the existing P-clamp on the left side of the frame near the steering head to secure the amplifier wiring.

### WARNING

**Be sure that steering is smooth and free without interference. Interference with steering could result in loss of vehicle control and death or serious injury. (00371a)**

- Make sure the wires do not restrict steering movement.
  - Route the wires along the frame backbone under the tank. Tie to existing wire bundles with cable straps, especially at any change in direction.
2. Coil excess wire under the fuel tank, inside the nacelle or under the handlebar clamp where it does not interfere with steering function. Install the 5A fuse (24) in the in-line fuse holder on the red wire.
  3. Lay the harness along the frame backbone, under the fuel tank and seat, with the four-way connector positioned near the steering head.
 

The connector may be placed inside the nacelle (Road King models) or handlebar clamp.
  4. Connect the four-way connector from the speaker pods to the four way connector on the wire harness assembly.
  5. See Figure 7. The 3.5 mm connector from the hand control can be secured to the handlebar with cable straps or secured to the upper triple clamp or nacelle with the adhesive-backed clip (21) from the kit. If using the clip:

#### NOTES

- *Ambient temperature should be **at least** 60 °F (16 °C) for proper adhesion of the clip to the vehicle.*
  - *Allow **AT LEAST 24 hours** after applying the clip before exposing the area to vigorous washing, strong water spray or extreme weather.*
  - *The adhesive bond will increase to maximum strength after about 72 hours at normal room temperature.*
6. Test-fit the clip to the upper triple clamp or nacelle before installation. Do not remove the liner until ready to apply the clip.

7. Clean with a mixture of 50 percent isopropyl alcohol and 50 percent distilled water. Allow to dry completely.
8. Remove the liner from the adhesive backing of the clip. Carefully position the clip to the upper triple clamp or nacelle, and press firmly into place. Hold the clip in position with steady pressure for a few seconds.
9. Secure the 3.5 mm connector from the hand control to the clip.

## RETURN TO SERVICE

1. **For Road King models only:** See the service manual and assemble the left and right nacelle halves. Assemble the handlebar cover to the vehicle.
 

**For 2011 and later Softail models only:** Install the split conduit (30) over the brake line where it passes closest to the amplifier.
2. **ALL models:** See the correct section (Carbureted or EFI Engine) of the service manual for fuel tank installation instructions.
3. Install the windshield (if equipped) to the vehicle per the instructions in the service manual or accessory kit. Make sure to protect the windshield and speaker pods from scratches during installation.

### WARNING

**Be sure that steering is smooth and free without interference. Interference with steering could result in loss of vehicle control and death or serious injury. (00371a)**

4. Make sure the speaker pods do not interfere with steering function, controls operation or visibility of instruments.

#### NOTE

*Verify that the ignition switch is in the OFF position **before** installing the main fuse or attaching the battery cable.*

5. **Models with main fuse:** See the service manual and install the main fuse.

#### **Models with main circuit breaker:**

- a. **For ALL models except XL Sportster:** See the service manual and attach the negative battery cable. Apply a light coat of petroleum jelly or corrosion retardant material to battery terminals.
- b. **For XL Sportster models only:** See the service manual, and connect the negative battery cable at the engine crankcase.

### WARNING

**After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)**

6. See the service manual and install the seat.
7. Turn the ignition switch to IGNITION, but do not start the motorcycle.
8. Connect the audio input cable (20) from the kit to the female 3.5 mm stereo connector from the hand control.

9. Connect the free end of the audio input cable to the headphone jack (or line out) of the portable audio player (purchased separately).
  - a. Turn on the audio player. Set the player volume output at 75-80 percent of maximum.
  - b. Turn on the amp using the hand control on/off push-button switch. The switch illuminates when power is on.
  - c. Use the handlebar control to adjust the volume level. VOL+ increases the volume. VOL- decreases the

volume.

- d. The amp and speakers can be operated with the ignition switch in either the "ACC" or "IGNITION" position.

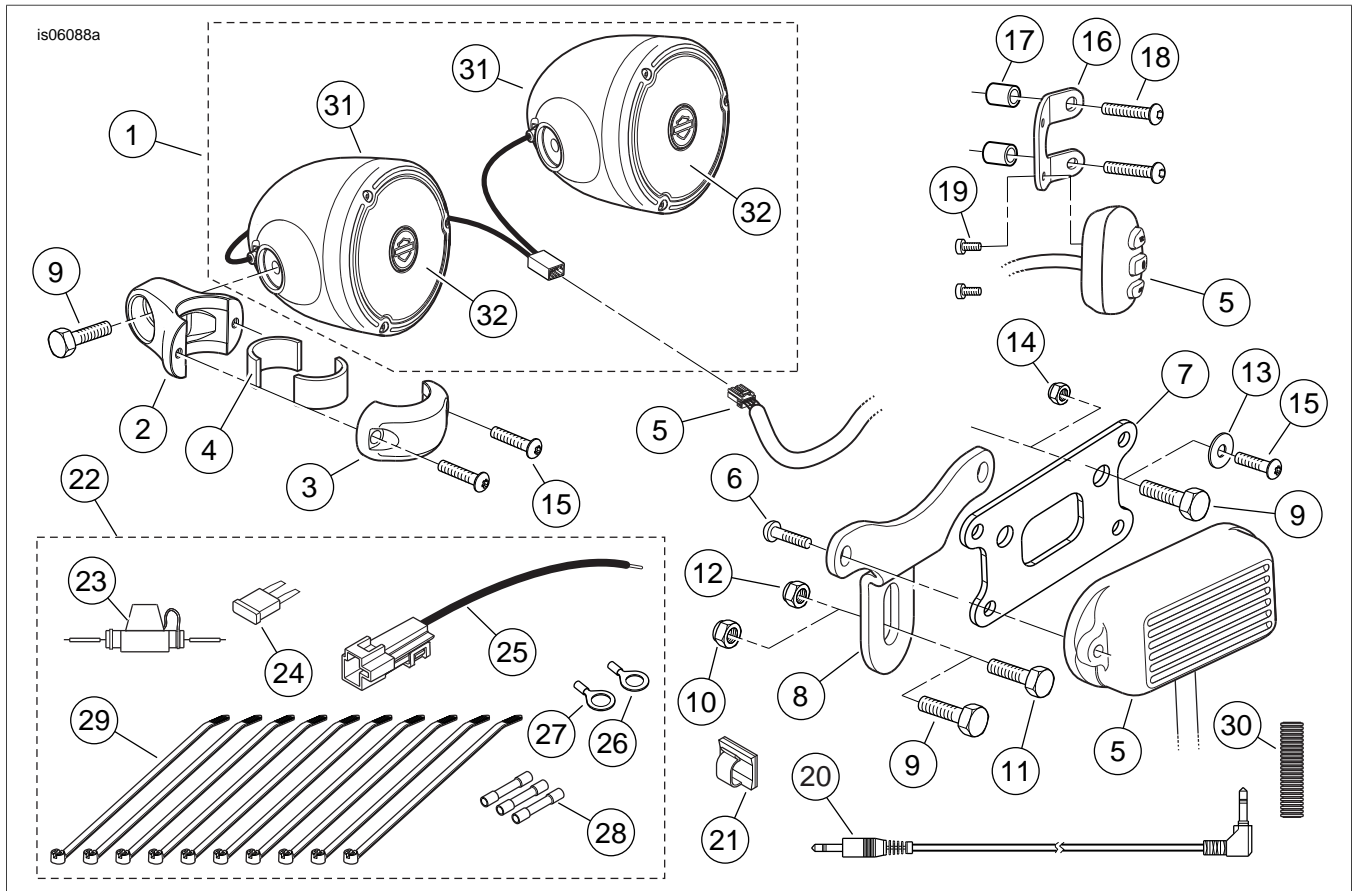
**NOTE**

*DO NOT secure an audio player with a **hard drive memory** on or to the vehicle. Vehicle vibration can permanently damage the device.*

*Refer to the audio player instructions to determine if the device to be used has a hard drive memory.*



# SERVICE PARTS



**Figure 7. Service Parts, Handlebar-Mounted Speaker and Amplifier Kits**

**Table 1. Service Parts**

Kit	Item	Description (Quantity)	Part Number
Kit 76262-08A Handlebar-Mounted Speaker/Amplifier Kit (Chrome)	1	Speaker pod assembly (chrome)(includes two of item 31, connected)	Not sold separately
	2	Speaker clamp, handlebar (lower, chrome)(2)	76558-08
	3	Speaker clamp, handlebar (upper, chrome)(2)	76559-08
Kit 76320-08A Handlebar-Mounted Speaker/Amplifier Kit (Black)	1	Speaker pod assembly (black)(includes two of item 31, connected)	Not sold separately
	2	Speaker clamp, handlebar (lower, black)(2)	76090-08
	3	Speaker clamp, handlebar (upper, black)(2)	76089-08

**Table 1. Service Parts**

<b>Kit</b>	<b>Item</b>	<b>Description (Quantity)</b>	<b>Part Number</b>	
Items common to BOTH kits	4	Spacer, handlebar speaker housing (4)	Not sold separately	
	5	Amplifier/hand control/wire harness assembly	70220-08	
	6	Screw, button head, TORX, 1/4-20 x 0.62 inch (16 mm) long (2)	924	
	7	Bracket, amplifier mounting (Sportster and Road King models)	76551-08A	
	8	Bracket, amplifier mounting (Dyna and Softail models)	Not sold separately	
	9	Cap screw, hex head, 3/8-16 x 0.75 inch (19 mm) long (4)	4713W	
	10	Hex locknut, 3/8-16 Nylock	7778	
	11	Cap screw, hex head, 5/16-18 x 0.75 inch (19 mm) long	3987	
	12	Hex locknut, 5/16-18 Nylock	7739	
	13	Fender washer, M6 (2)	Not sold separately	
	14	Hex locknut, 1/4-20 Nylock (2)	7686	
	15	Screw, button head, TORX, 1/4-20 x 0.75 inch (19 mm) long (6)	923	
	16	Bracket, hand control	Not sold separately	
	17	Spacer, hand control mounting (2)	Not sold separately	
	18	Cap screw, hex socket button head, M6 x 45 mm long (2) ( <b>Sportster</b> )	Not sold separately	
		Cap screw, hex socket button head, 1/4-20 x 1.75 inch (44.4 mm) long (2) ( <b>except Sportster</b> )	3129	
	19	Cap screw, button head, Phillips, #10-24 x 0.5 inch (13 mm) long (2)	Not sold separately	
	20	Audio input cable	92383-09	
	21	Clip, adhesive backed	Not sold separately	
	22	Electrical hardware pack (includes items 23 through 29)	Not sold separately	
	23	• In-line fuse holder	70306-02	
	24	• Fuse, blade type, 5A (light tan)	72331-95	
	25	• Adapter wire, 12 V positive	76204-03	
	26	• Ring terminal, #18-22 AWG (1/4 inch (6.4 mm) stud)	9858	
	27	• Ring terminal, #18-22 AWG (5/16 inch (7.9 mm) stud)	9859	
	28	• Sealed splice connector, #14-16 AWG (blue) (3)	70586-93	
	29	• Cable strap (10)	10006	
	30	Conduit, split loom, convoluted 0.25 inch x 5 inch (6.4 mm x 127 mm) long	62519-03	
	<b>Service parts for speaker pod assembly:</b>			
		31	Speaker pod, chrome (2) (includes item 32)	76223-08
Speaker pod, black (2) (includes item 32)			76225-08	
	32	Speaker grille, with trim ring and logo badge (2)	76215-08	